CLAIMS

1. Electromagnetically actuated dual clutch-brake combination (8) for the optional drive connection of a drive input shaft (2) to a first drive output shaft (4) or a second drive output shaft (6), with a clutch armature (28) connected rotationally fast to the drive input shaft (2), which can be moved axially between a first shift position and a second shift position, and which is connected to transmit torque to the first output shaft (4) in the first shift position and to the second output shaft (6) in the second shift position, with a clutch magnet coil (12) attached on the housing, which brings the clutch armature (28) to the first shift position when it is energized by electric current, with restoring means (34) which move the clutch armature (28) to the second shift position when the clutch magnet coil (32) is switched off, and with an electromagnetic brake (52) which comprises a brake magnet coil (56) attached to the housing and an axially movable brake armature (50), characterized in that the brake armature (50) is connected rotationally fast to the second drive output shaft (6), which it brakes when the brake magnet coil (56) is energized with electric current.

2. Electromagnetically actuated dual clutch-brake combination according to claim 1, characterized in that the clutch armature (28) has at one end a friction surface (26) which in the first shift position is pressed against an opposite friction surface (24) of a first flange (20) fixed on the first output shaft (4).

3. Electromagnetically actuated dual clutch-brake combination according to claims 1 or 2, characterized in that the clutch armature (28) has a hollow cylindrical area (38) provided with inner gear teeth (36) which, in the second shift position, engage with the drive gear teeth (40) of a second flange (42) arranged on the second output shaft (6).

4. Electromagnetically actuated dual clutch-brake combination according to claim 3, characterized in that the second flange(42) is axially stepped, the drive teeth being formed on a radially outer step (44), and an annular disk spring (48) being attached to the radially inner step (46), which connects the brake armature rotationally fast and axially movably to the second flange (42).

5. Electromagnetically actuated dual clutch-brake combination according to claims 3 or 4, characterized in that the second output shaft (6) is constructed as one piece with the second flange (42).

6. Electromagnetically actuated dual clutch-brake combination according to any of claims 3 to 5, characterized in that the second output shaft (6) and the second flange (42) have in the area of their rotation axis a through-going hollow space, through which the first output shaft (4) passes.

7. Electromagnetically actuated dual clutch-brake combination according to claim 3, characterized in that a widened hub of the first flange (20) adjoins the radially inner step (46) of the second flange (42) a small axial distance away from it, such that the hub, at least in part, occupies the same axial structural space as the radially outer step (44) of the second flange (42).

8. Electromagnetically actuated dual clutch-brake combination according to claims 6 or 7, characterized in that the first output shaft (4) extends axially over the area of the first flange (20) and passes into a hollow cylindrical area (58) of the drive input shaft (2), in which it is mounted.

9. All-wheel distributor gearbox for a vehicle with several drivable axles with a variable longitudinal differential lock and an at-least two-stage shiftable range gear system arranged after the main gearbox of the vehicle, whose longitudinal differential lock comprises a clutch which, depending on the degree of its closure, transmits a torque between the two drivable axles of the vehicle, and whose range gear system comprises a shift element, such that the shift element of the range gear system can be actuated directly or via an actuation mechanism by the first drive output shaft (4) of an electromagnetically actuated dual clutch-brake combination according to any of the preceding claims, and such that the degree of closure of the clutch of the longitudinal differential lock can be varied by a rotation of the second drive output shaft (6).